



MISSOURI DEPARTMENT OF NATURAL RESOURCES

Doe Run Herculaneum Smelter - Analysis of Recontamination of Residential Yards with Lead

Fact Sheet

3/2004

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The Missouri Department of Natural Resources has analyzed the results of periodic soil sampling from yards in Herculaneum. This analysis, and the Missouri Department of Health and Senior Services' review of the analysis, has found that in yards sampled within ¼ mile of the lead smelter there is a statistically significant increase in the concentration of lead. The increasing concentrations of lead occurred after new air emission controls installed at the facility were completed in July 2002.

The Department of Natural Resources and the Department of Health and Senior Services have based this conclusion on soil samples collected and analyzed by the U.S. Environmental Protection Agency since August 2002.

The Department of Natural Resources' analysis of the data and Department of Health and Senior Services' review of this analysis concluded that the potential rate of recontamination could result in lead concentrations exceeding the soil action level for lead (400 ppm) in less than 10 years. The Department of Natural Resources will continue to analyze additional soil data as it is collected and may confirm or alter this conclusion based on that analysis.

None of the residential yards in this study currently show lead concentrations exceeding levels of health concern (400 ppm). Current concentrations average about 150 ppm Pb within ¼ mile of the smelter.

The Department of Natural Resources and the Missouri Department of Health and Senior Services considers this information important for homeowners within the Voluntary Property Purchase (VPP) zone when considering whether to request or accept purchase offers from Doe Run Company per the April 2002 Settlement Agreement between the state of Missouri and the Doe Run Company.

This settlement agreement requires that no homes in the VPP zone be reoccupied until (1) "redeposition studies...are complete", and (2) until there is an agreement by Doe Run, the Department of Natural Resources, the Department of Health and Senior Services and the City of Herculaneum that "re-occupancy of residence is not a risk to human health." The Department of Natural Resources and the Department of Health and Senior Services believe that the results of the recontamination study do not support a conclusion that re-occupancy is not a risk to human health. In fact, recent results from the ongoing redeposition studies in Herculaneum indicate that reoccupation is not prudent at this time and, accordingly, do not intend to approve of any reoccupation of homes in the VPP zone.



The U.S. Environmental Protection Agency collects soil sampling for recontamination quarterly. The next round of redeposition data should be available in May 2004. As more data are generated, the Department of Natural Resources and the Department of Health and Senior Services will continue to refine estimates of recontamination and inform the public of its findings.

The Department of Natural Resources and the Department of Health and Senior Services expect Doe Run to discontinue renting properties they own within the Voluntary Property Purchase Zone by Dec. 31, 2004, in accordance with the April 2002 Settlement Agreement. Exceptions will be granted on a case-by case basis. (The Department of Natural Resources and the Department of Health and Senior Services expect that exceptions will be granted for households with retirees, elderly or disabled residents whose welfare would be threatened by the turmoil of relocation provided that their health would not be seriously threatened by staying and provided they do not have children in the household.)

For more information

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